

## Robert Bosch GmbH

Power Tools Division 70745 Leinfelden-Echterdingen Germany

www.bosch-pt.com

**2 609 005 792** (2011.10) O / 187 **WEU** 



# IXO



- de Originalbetriebsanleitung
- **en** Original instructions
- fr Notice originale
- es Manual original
- pt Manual original
- it Istruzioni originali
- nl Oorspronkelijke gebruiksaanwijzing
- da Original brugsanvisning
- Bruksanvisning i original
- **no** Original driftsinstruks
- fi Alkuperäiset ohjeet
- **el** Πρωτότυπο οδηγιών χρήσης
- tr Orijinal işletme talimatı



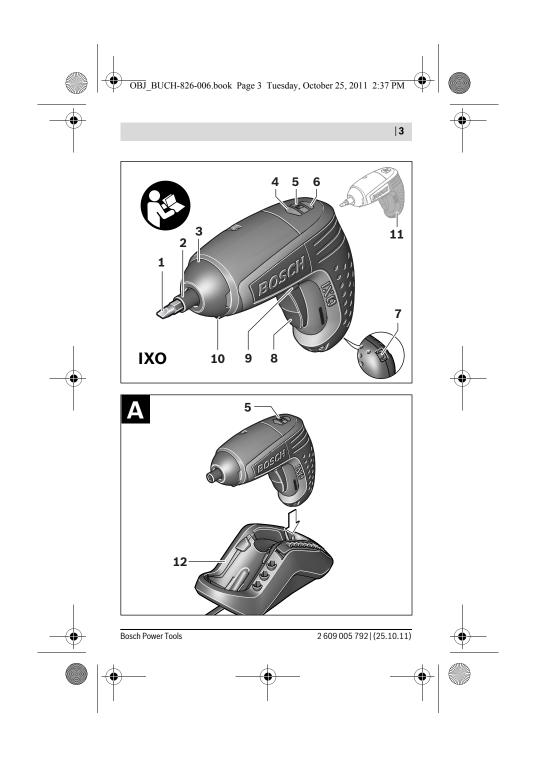


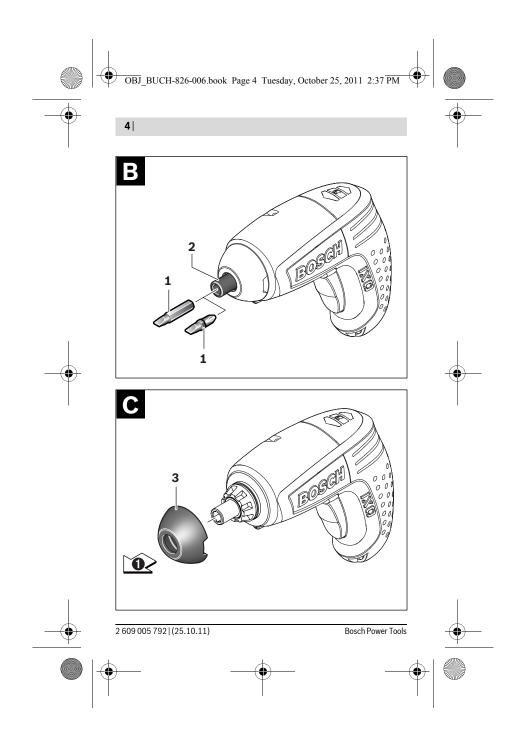


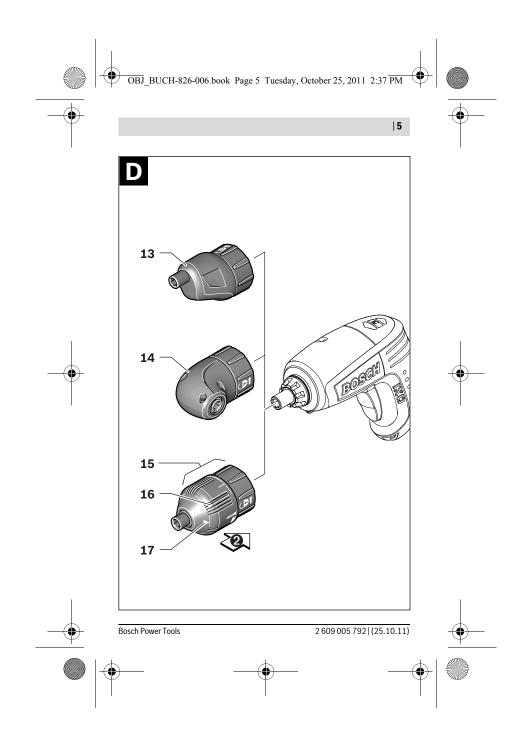


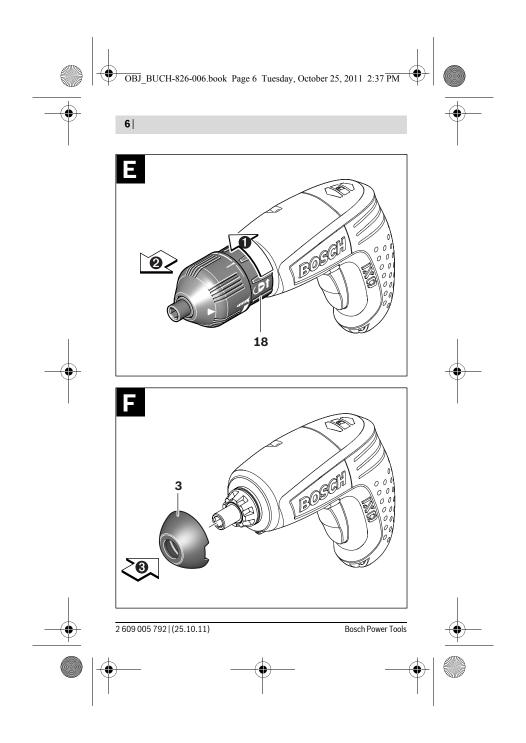






















▶ Integrierte Akkus dürfen nur zur Entsorgung entnommen werden. Durch das Öffnen der Gehäuseschale kann das Elektrowerkzeug zer-

Um den Akku aus dem Elektrowerkzeug zu entnehmen, betätigen Sie den Ein-/Ausschalter 8 solange, bis der Akku vollständig entladen ist. Drehen Sie die Schrauben am Gehäuse heraus und nehmen Sie die Gehäuseschale ab. Trennen Sie die Anschlüsse am Akku und nehmen Sie den Akku heraus.

Änderungen vorbehalten.

## **English**

## **Safety Notes**



**AWARNING** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

## Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

## Work area safety

- ► Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- ▶ Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- ► Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

## **Electrical safety**

▶ Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.







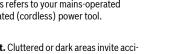




















- ► Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- ► Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- ▶ Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges and moving parts. Damaged or entangled cords increase the risk of electric shock.
- ➤ When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

### Personal safety

- ► Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury
- ▶ Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- ➤ Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- ➤ Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.



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- ▶ Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- ► If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

## Power tool use and care

- ▶ Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- ▶ Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- ▶ Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- ➤ Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- ▶ Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- ► Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- ▶ Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.





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## Battery tool use and care

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- ▶ Recharge only with the charger specified by the manufacturer. A  $charger\ that\ is\ suitable\ for\ one\ type\ of\ battery\ pack\ may\ create\ a\ risk\ of$ fire when used with another battery pack.
- ▶ Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- ▶ When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to anoth**er.** Shorting the battery terminals together may cause burns or a fire.
- ▶ Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

### Service

▶ Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

## **Safety Warnings for Screwdrivers**

- ▶ Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- ► Hold the machine with a firm grip. High reaction torque can briefly occur while driving in and loosening screws.
- ▶ Always wait until the machine has come to a complete stop before placing it down. The tool insert can jam and lead to loss of control over the power tool.
- ▶ Before any work on the machine (e.g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position. Unintentional actuation of the On/Off switch can lead to injuries.



Protect the power tool against heat, e. g., against continuous intense sunlight, fire, water, and moisture. Danger of explosion.

































► In case of damage and improper use of the battery, vapours may be emitted. Provide for fresh air and seek medical help in case of complaints. The vapours can irritate the respiratory system.

## **Safety Warnings for Battery Chargers**



Keep the battery charger away from rain or moisture. Penetration of water in the battery charger increases the risk of an electric shock.

- Only charge Bosch lithium ion batteries or batteries installed in Bosch products with the voltages listed in the technical data. Otherwise there is danger of fire and explosion.
- Keep the battery charger clean. Contamination can lead to danger of an electric shock.
- ➤ Before each use, check the battery charger, cable and plug. If damage is detected, do not use the battery charger. Never open the battery charger yourself. Have repairs performed only by a qualified technician and only using original spare parts. Damaged battery chargers, cables and plugs increase the risk of an electric shock.
- ➤ Do not operate the battery charger on easily inflammable surfaces (e. g., paper, textiles, etc.) or surroundings. The heating of the battery charger during the charging process can pose a fire hazard.
- Supervise children. This will ensure that children do not play with the charger.
- Children or persons that owing to their physical, sensory or mental limitations or to their lack of experience or knowledge, are not capable of securely operating the charger, may only use this charger under supervision or after having been instructed by a responsible person. Otherwise, there is danger of operating errors and injuries.

Products sold in **GB only**: Your product is fitted with a BS 1363/A approved electric plug with internal fuse (ASTA approved to BS 1362). If the plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place by an authorised customer service agent. The replacement plug should have the same fuse rating as the original plug.

The severed plug must be disposed of to avoid a possible shock hazard and should never be inserted into a mains socket elsewhere.



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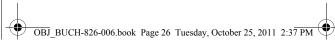
















## **Product Description and Specifications**





Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

## **Intended Use**

The machine is intended for driving in and loosening screws.

## **Product Features**

The numbering of the product features refers to the illustration of the machine on the graphics page.

- 1 Screwdriver bit\*
- 2 Tool holder
- 3 Rubber cap
- 4 Indicator for right rotation
- 5 Battery charge-control indicator
- 6 Indicator for left rotation
- 7 Suspension hook
- 8 On/Off switch
- 9 Rotational direction switch
- 10 "PowerLight"
- 11 Handle (insulated gripping surface)
- 12 Battery charger
- 13 Eccentric driver head\*
- 14 Angle driver head\*
- 15 Torque attachment\*
- 16 Torque presetting ring\*
- 17 Torque-setting mark\*
- 18 Release ring\*

\*Accessories shown or described are not part of the standard delivery scope of the product. A complete overview of accessories can be found in our accessories program.



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## **Technical Data**

Cordless Screwdriver		IXO
Article number		3 603 J81 0
Rated voltage	V=	3.6
No-load speed	min <sup>-1</sup>	215
Max. torque for hard/soft screw- driving application according to		4.5.10
ISO 5393	Nm	4.5/3
Max. screw dia.	mm	5
Weight according to EPTA-Procedure 01/2003	kg	0.3
Battery		Li-lon
Capacity	Ah	1.3
Number of battery cells		1
Battery Charger		
Article number		2 607 225 809 (EU)
		2 607 225 811 (UK/SMA)
		2 607 225 813 (AU)
Charging time	min	330
Protection class		□/II

Please observe the article number on the type plate of your machine. The trade names of the individual machines may vary.

## **Noise/Vibration Information**

Measured sound values determined according to EN 60745.

Typically the A-weighted sound pressure level of the product is less than  $70\,\mathrm{dB(A)}$ . Uncertainty K = 3 dB.

The noise level when working can exceed 80 dB(A).

## Wear hearing protection!

Vibration total values  $a_h$  (triax vector sum) and uncertainty K determined according to EN 60745:

Screwdriving without impact:  $a_h < 2.5 \text{ m/s}^2$ ,  $K = 1.5 \text{ m/s}^2$ .



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The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep hands warm, organise work patterns.



## **Declaration of Conformity €**

We declare under our sole responsibility that the product described under "Technical Data" is in conformity with the following standards or standardization documents: EN 60745 (battery powered products) and EN 60335 (battery chargers) according to the provisions of the directives 2011/65/EU, 2006/95/EC, 2004/108/EC, 2006/42/EC.

Technical file (2006/42/EC) at: Robert Bosch GmbH, PT/ETM9, D-70745 Leinfelden-Echterdingen

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Dr. Egbert Schneider Dr. Eckerhard Strötgen Senior Vice President Engineering Director

Engineering PT

PT/ESI

Ma. Illuda 1. V. Nuvyun Robert Bosch GmbH, Power Tools Division D-70745 Leinfelden-Echterdingen 06.09.2011



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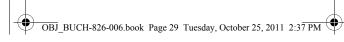


















## **Assembly**

▶ Before any work on the machine (e. g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position. Unintentional actuation of the On/Off switch can lead to injuries.

## Battery Charging (see figure A)

- ▶ Do not use other battery chargers. The supplied battery charger is designed for the Lithium-Ion battery in your machine.
- ▶ **Observe the mains voltage!** The voltage of the power supply must correspond with the data given on the nameplate of the battery charger. Battery chargers marked with 230 V can also be operated with

Note: The battery is supplied partially charged. To ensure full capacity of the battery, completely charge the battery in the battery charger before using your power tool for the first time.

The Lithium-Ion battery can be charged at any time without reducing its service life. Interrupting the charging procedure does not damage the bat-

The Lithium-Ion battery is protected against deep discharging. When the battery is discharged, the machine is automatically switched off by a protective circuit: The inserted tool no longer moves and a slight whistling noise can be heard.

## WARNING

Do not continue to press the On/Off switch after the machine has been automatically switched off. The battery can be damaged.

When the battery charge-control indicator 5 lights up red while the On/Off switch 8 is depressed half way, then the battery has less than 30% of its capacity and should be charged.

The charging procedure starts as soon as the main plug of the battery charger is inserted into the socket and the cordless screwdriver is afterwards placed on the battery charger 12.

The battery charge-control indicator **5** indicates the charging progress. The indicator lights up green during the charging process. When the battery charge-control indicator 5 is no longer lit, the battery is fully charged.







**Bosch Power Tools** 





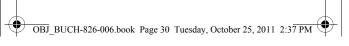
















During the charging procedure, the handle of the machine warms up. This is normal.

Disconnect the battery charger from the mains supply when not using it for longer periods.

The power tool cannot be used during the charge procedure; it is not defective when inoperative during the charging procedure.

## ► Protect the battery charger against moisture!

Observe the notes for disposal.

## Changing the Tool (see figure B)

► Do not use double-sided screwdriver blades that are longer than 25 mm.

Insert the screwdriver bit 1 directly into the tool holder 2.



The eccentric driver head **13** enables screwdriving close to edges.

The angle driver head **14** enables screwdriving at hard to reach locations. With the torque presetting ring **16** on the torque attachment **15**, the requested torque can be preset in 10 steps. With the correct setting, the tool bit is stopped as soon as the screw is driven flush into the material or when the set torque is reached.



For assembly of the attachments, pull the rubber cap  $\bf 3$  off toward the front. Afterwards the attachments can be mounted. The attachments can be mounted offset by  $45^\circ$ .

## Dismounting (see figures E-F)

To dismount the attachments, turn the release ring  $\bf 18$  in rotation direction  $\bf 0$  and pull the attachment off toward the front. Afterwards, mount the rubber cap  $\bf 3$  again.





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## English | 31 **Operation**

## **Starting Operation**

**Reversing the Rotational Direction** 

The rotational direction switch 9 is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch 8 ac-

Right rotation: For driving in screws, push the rotational direction switch 9 left to the stop.



The indicator for right rotation 4 lights up when the On/Off switch 8 is actuated and the motor is running.

Left Rotation: For loosening or unscrewing screws, push the rotational direction switch 9 right to the stop.



The indicator for left rotation 6 lights up when the On/Off switch 8 is actuated and the motor is running.

## **Switching On and Off**

To **start** the machine, press the On/Off switch **8** and keep it pressed.

The power light 10 lights up when the On/Off switch 8 is slightly or completely pressed, and allows the work area to be illuminated when lighting conditions are insufficient.

To switch off the machine, release the On/Off switch 8.

## Fully automatic spindle locking (Auto-lock)

The drill spindle is locked when the On/Off switch 8 is not pressed.

This enables screws to be screwed in, even when the battery is empty and allows for the machine to be used as a screwdriver.

▶ When the drilling spindle is locked, do not press the On/Off switch 8 for more than 15 seconds. Otherwise the power tool can be dam-

## **Working Advice**

▶ Apply the power tool to the screw only when it is switched off. Rotating tool inserts can slip off.

Up to 13 screwdriver bits can be stored on the side of the battery charger 12. The fixture that holds the screwdriver bits can be removed.



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## **Maintenance and Service**

## **Maintenance and Cleaning**

- ➤ Before any work on the machine (e. g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position. Unintentional actuation of the On/Off switch can lead to injuries.
- ► For safe and proper working, always keep the machine and ventilation slots clean.

When the battery is no longer operative, please refer to an authorised after-sales service agent for Bosch power tools.

If the replacement of the supply cord is necessary, this has to be done by Bosch or an authorized Bosch service agent in order to avoid a safety hazard.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

In all correspondence and spare parts order, please always include the 10-digit article number given on the type plate of the machine.



Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. Exploded views and information on spare parts can also be found under:

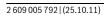
## www.bosch-pt.com

Our customer service representatives can answer your questions concerning possible applications and adjustment of products and accessories













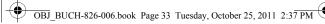
















## **Great Britain**

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**Republic of South Africa** 

## **Customer service**

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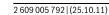
The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. The user can transport the batteries by road without further requirements.

When being transported by third parties (e.g.: air transport or forwarding agency), special requirements on packaging and labelling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required.



The machine, rechargeable batteries, accessories and packaging The machine, rechargeable batteries, accessories and should be sorted for environmental-friendly recycling.

Do not dispose of power tools and batteries/rechargeable batteries into household waste!



**Bosch Power Tools** 

















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## **KZN - BSC Service Centre**

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Tel.: +27 (031) 7 01 21 20

## Western Cape - BSC Service Centre

Democracy Way, Prosperity Park

Fax: +27 (021) 5 51 32 23



Midrand, Gauteng

Tel.: +27 (011) 6 51 96 00 Fax: +27 (011) 6 51 98 80











## Only for EC countries:



According to the European Guideline 2002/96/EC, power tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

Batteries no longer suitable for use can be directly returned at:

## **Great Britain**

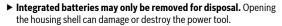
Robert Bosch Ltd. (B.S.C.) P.O. Box 98 Broadwater Park North Orbital Road Denham \_ Uxbridge UB 9 5HJ Tel. Service: +44 (0844) 736 0109 Fax: +44 (0844) 736 0146

## Battery packs/batteries:



E-Mail: boschservicecentre@bosch.com

Please observe the instructions in section "Transport", page 34.



When removing the battery from the machine, actuate the On/Off switch 8 until the battery is completely discharged. Unscrew the screw in the casing and take off the casing shell. Disconnect the connections on the battery and remove the battery.

## Subject to change without notice.



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